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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,455	12/22/2000	Stephane Harnois	G&C 30566.137US01	9812

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EXAMINER
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VENT, JAMIE J

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/747,455

Applicant(s)

HARNOIS, STEPHANE

Examiner

Jamie Vent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable by Bopardikar et al (US 6,826,778) in view of Ng et al (US 5,278,838).

**[claim 1]**

In regard to Claim 1, Bopardikar et al discloses an image processing apparatus and method having a computer-readable medium with computer readable instructions configured to store image data with redundant protection comprising:

- input means configured to receive an input stream of real-time digital video data (Figure 16 shows the input stream of broadcast video data as further stated in Column 5 Lines 36-40);
- storage means for storing image data in an array of disks(Figure 14 shows the storage medium for storing the data); and

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- processing means arranged to perform processing operations upon said image data (Figure 16 item 1614 shows the processing means which processes the operations), wherein
- said input means receives an input stream of real-time digital video data (Figure 16 line 1615 receives input streams of real-time digital video data as further described in Column 17 Lines 22-25);
- said processing means performs a reading operation to read said data from said storage means, perform a data manipulation upon said video data and generate parity information to create protected video data (Column 13 Lines 52+ and Column 14 Lines 1-12 describe the processing which performs the reading operations and data manipulations); and
- said processing means performs a second writing operation to write said protected video data to said storage means (Column 13 Lines 21-42 describes the additional writing operation to write the protected video data to the storage means); however, fails to disclose a said processing means performs a first writing operation to write said video data to said storage array means in real-time without RAID calculations and without parity.

Ng et al discloses in Column 3 Lines 5+ describes the processing of the write operations wherein the processing is done without RAID calculations and without parity. This is done as disclosed by Ng et al by not conforming to RAIDs 4 and 5 and thereby provides the ability to process with calculations and without parity to allow for the system to process the images appropriately in a fast and efficient manner. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an image processing apparatus, as

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disclosed by Bopardikar et al, and further incorporate a system that processes without calculations and without parity, as disclosed by Ng et al.

**[claims 2 & 9]**

In regard to Claims 2 and 9, Bopardikar et al discloses an image processing apparatus wherein said real-time digital data represents high definition images defined by luminance samples and color difference samples (Column 5 Lines 42+ describes the input of the real0time digital data that is representative of high definition data).

**[claims 3 & 10]**

In regard to Claims 3 and 10, Bopardikar et al discloses an image processing apparatus wherein said high definition digital video data is derived by scanning cinematographic film (Column 5 Lines 42+ describes the high definition data that is inputted into the system and furthermore it is inherent that the high definition digital video data that is inputted into the system is derived from a scanning cinematographic film).

**[claims 4 & 11]**

In regard to Claims 4 and 11, Bopardikar et al discloses an apparatus wherein said real-time digital video data represents standard broadcast television images defined by luminance and color difference signals (Column 5 Lines 35-64 describes the real-time digital video data that represents the television images which is defined by the luminance and color difference signals).

**[claims 5 & 12]**

In regard to Claims 5 and 12, Bopardikar et al discloses an apparatus wherein said luminance samples and said color difference samples are converted to three color samples before performing said writing step (Column 15 Lines 64+ and Column 16 Lines 1-10 describe the conversion of the samples into the RGB color space).

**[claims 6 & 13]**

In regard to Claims 6 and 13, Bopardikar et al discloses an apparatus wherein said data manipulation step includes converting luminance plus color difference signals into three color samples (Column 16 Lines 23-35 describes the converting of the different signals into three color samples before manipulating the data).

**[claims 7 & 14]**

In regard to Claims 7 and 14, Bopardikar et al discloses an apparatus wherein said data manipulation step includes generating reduced bandwidth proxy images and writing said proxy images to storage (Column 13 Lines 28+ describes the data manipulation step which includes bandwidth proxy images and writing the images to storage).

**[claims 8, 15, & 19]**

In regard to Claims 8, 15, and 19, Bopardikar et al discloses an image processing apparatus and method, as previously discussed in Claim 1, with the additional limitation of calculating redundant parity data to generate protected image data (Column 22 Lines 15-52 describes the determination of redundancy to generate a protected image of the data).

**[claim 16]**

In regard to Claim 16, Bopardikar et al discloses an image process apparatus and method, as previously disclosed in Claim 2, with the additional limitation of the converting of samples representing luminance and color difference to three colors (RGB) samples before performing said first writing step (Column 15 Lines 64+ and Column 16 Lines 1-10 describe the conversion of the samples into the RGB color space which takes place before the converting of samples).

**[claim 17]**

In regard to Claim 17, Bopardikar et al discloses an image process apparatus and method, as previously disclosed in Claim 3, with the additional limitation of the converting luminance plus

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color difference to three colors (RGB) samples during said data manipulation step (Column 16 Lines 23-35 describes the converting of the different signals into three color samples before manipulating the data).

**[claims 18 & 20]**

In regard to Claims 18 and 20, Bopardikar et al discloses an image process apparatus and method, as previously disclosed in Claim 3, with the additional limitation of the generating reduced bandwidth proxy images and writing said proxy images to storage during said data manipulation step (Column 13 Lines 28+ describes the data manipulation step which includes bandwidth proxy images and writing the images to storage).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Stallmo (US 5,208,813).

***Contact Information***

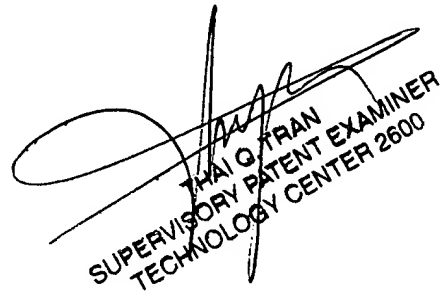
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie Vent whose telephone number is 571-272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. Effective July 15, 2005, the Central Fax Number will change to 571-273-8300. Faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jamie Vent



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